Shipping Shipping Management



Packing

Transport

Handling

AURIESTI INEC



with Positive *Automatic Moistening Control

Faulty sealing methods cost industry \$200,000-000 last year! You can avoid costly claims and lost customers by Tayper sealing - featuring Positive Automatic Moistening Control. Your cartons arrive RIGHT because they're sealed RIGHT! Tape's never too wet, too dry, too short or too long and the moisture is evenly distributed. Speedy, the National Tayper takes rush hours in stride while saving 50% in tape over manual "guesswork" dispensing. And like a camel, it thrives on nothing

but water! Order Itstix Tape printed with your company name or trade mark for quick identification. It will provide protection against pilfering.

Only Nashua, world's largest manufacturer of automatic tape moistening machines and tape offers you a complete sealing service in machines, tape and helpful advice. Let our representative show you how to assure a safe arrival every time from your platform to the NASHUA

* Endorsed by the Association of American Railroads and the Gummed Industries Association, Inc.





Please send more facts on Nashua's 3-Point Program for Safe Arrival At Destination.

Name

Company

Kimpak Float Packaging

Surface Protection Cuts shipping costs reduces damage in transit!

Last year, dozens of manufacturers of furniture and other products revised and streamlined their packaging operations based on facts and figures about KIMPAK* Float Packaging. They found, through actual comparison, that KIMPAK offered more economical, more dependable packaging protection. And because there is a specification of KIMPAK for every cushioning need, these facts may apply to your packaging operation as well:

- · KIMPAK creped wadding, in rolls or sheets, is as easy to apply as wrapping paper. It saves literally hours in the shipping room.
- · KIMPAK is clean and free from damaging foreign matter; will not scratch, rub or press-mark delicate finishes. It's pleasant to handle.

 Kimpak is a highly efficient cushioning material—made especially to absorb continuous vibration and severe shocks, defend against roughest handling. Its "springy" residency provides fisat packaging—the world's most effective shipping protection.

POSTER BED

KIMPAK is the neatest, most attractive cush-ioning for your product. It's fresh-looking both before and after using—completely elimi-nates litter and mess in unpacking.

Today, won't you investigate KIMPAK Float Packaging, and compare it with your present methods? For immediate detailed information, contact the KIMPAK distributor listed in your classified phone directory under "Packing Materials" or "Packing Materials-Shipping", or write to Kimberly-Clark Corp., Neenah, Wis.



1. Sheets of correct dimension are easily cut from rolls of KIM-PAK. No waste.



2. All finished surfaces of head and foot pieces are completely protected by KIMPAK.



3. As each KIMPAK sheet is ap plied it is firmly attached by stapling, taping or tying.



4. Final KIMPAK-wrapped package is now ready for loading into full freight car, eliminating any further packaging protection.

All photographs courtesy of New Orleans Furniture Manufacturing Co.

VISIT OUR BOOTH NO. 801 AT THE WESTERN PACKAGING AND MATERIALS HANDLING EXPOSITION CIVIC AUDITORIUM, SAN FRANCISCO, CALIF., AUGUST 16-18

CREPED WADDING



- FREE BOOKLET-

KIMBERLY-CLARK CORPORATION Neenah, Wisconsin

SM-850

Please send me free, the illustrated KIMPAK Booklet, "Float Packaging".

City..... Zone..... State......

*T. W. REG. U. S. PAT. OFF. MEN-METHODS - MATERIALS

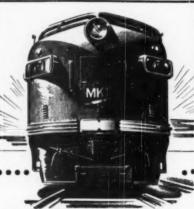
FREIGHT MERCHANDISE SERVICE

fast and dependable

via KATY KOMET

and other Katy Fast Freights to and from MISSOURI, KANSAS, **OKLAHOMA** and TEXAS

> speeds shipments whatever their size



COORDINATED RAIL-TRUCK SERVICE

Just phone your nearest Katy representative and tell him what you have to ship and where it's going.

From then on, Katy's safe, modern, ON-TIME L. C. L. service takes over until shipment is delivered to your customers' door.

> Free pick-up and delivery from and to shippers' door

All cars are worked at our freight houses day of arrival.



for details

NATURAL ROUTE

GYS TO MORE SALES VALUE Use Sterling Supreme **Printed Gummed Tape** to seal boxes or packages for these advantages: Powerful Advertising at Lowest Cost.

- More Customer Confidence in the Centents of the box or packages.
- Preferential Freight Handling speeds up delivery.
- Instant Identification.
- Pilferage Protection. Once opened, a thief can't match the printed tape on your box or package.
- Seal your boxes or packages with Sterling Supreme printed gummed tape and you receive all these extra salescreating values. In addition, Sterling Supreme is known the world over for best gummed tape results. It's made of the finest quality Kraft paper with a perfect animal glue gumming formula. You can do no better than Sterling Supreme . . . especially if it's printed with your name or sales message. Ask your paper merchant to show you printed samples of this outstanding gummed tape. You'll be surprised at its low cost.



THE GUMMED PRODUCTS COMPANY

OFFICES . TROY, OHIO . MILLS

Boston * Chicago * Cincinnati * Cleveland * Detroit * Los Angeles * New York * Philadelphia * St. Louis

for faster handling - MARSH STENCIL MARKING!

JONES INC. I MAIN ST. STATE, USA

JONES, INC. 1 MAIN ST. STATE, U.S.A.

MANY TIMES LARGER

Many times as readable as typewritten tags or labels

Look at this comparison—the stencil letters were cut on a standard Marsh %" Stencil Machine—the label typed on an ordinary typewriter. Here you quickly see one of the advantages of stencil-marked addresses. More than just easier to read, Marsh Stencil Marking is permanent, quicker to apply. And, your savings in a year of normal use pay for your stenciling equipment up to 3 times. A typical user reports—"We're saving \$50 a month with the Marsh Stencil installation over the typing of labels for each carton. Every Shipper should investigate this time-and-labor-saving method." Why not let us help you modernize your shipping department? Write today for free Handbook on Stencil Marking, samples, prices. No obligation.



MARSH STENCIL MACHINE COMPANY
75 MARSH BUILDING, BELLEVILLE, ILLINOIS, U. S. A.



MARSH STENCIL MACHINES

Cut three size letters...%", %", 1" to meet Gav't. Spec. Newest design, Hardened Dies, Quick Replacement Punches, plus seven new features!



MARSH STENCIL INKS

Eight brilliant colors for stenciling all types of shipments. Waterproof, fast-drying, permanentl



MARSH FOUNTAIN BRUSHES

Handle halds ink, button controls flow. Marks 500 stencils without refill.



MARSH OIL BOARD

For cutting stencils. Cuts clean, sharp letters, good for several thousand stencil marks!

IMMEDIATE DELIVERY

SHIPPING MANAGEMENT AUGUST, 1930

Packing

A Punch .. By S. H.

AS THE Korean war effort grows in intensity the need for intelligent export packing procedures makes itself felt more than ever. A recent suggestion for a "Steamship Carriers Freight Claim Prevention Bureau" similar tothat operated by the Association of American Railroads therefore deserves special attention. R. Bruce Miller, marine secretary of the North America Companies, Philadelphia, it was noted by "Export Packer & Shipper" made the suggestion in a recent speech to Export Managers:

... "it seems sensible to me to relate the packing to the handling and the stowage, and to arrive at the optimum conditions for each, i.e., the type of packing, handling, and stowage which will get the cargo to destination in sound condition at the least combined cost for packing, handling, and stowage."

Although the packaging committee of three shippers, three underwriters, and three steamship officials which was recently appointed by the president of the Maritime Association of the Port of New York has not yet submitted its full report, Mr. Miller said he hoped that the committee would recommend such a bureau.

If the organization were set up, its purposes as proposed by Mr. Miller would be five in number.

The bureau would determine reasonable minimum standards of export packing, and they would be based upon the commodity in question and the voyage it would take.

The bureau would make available to carriers and shippers information on packing and marking, foreign port conditions, and special hazards.

Special projects of the bureau would be related to packing in the interest of loss prevention, and would concern: unit loads, handling and stowage costs as they relate to packing, and maximum and minimum sizes and weights for economical handling.

The bureau would make recommendations to carriers on promotion of better packing by rate of carriage or by rejection of inadequately packed shipments.

The proposed bureau should, in Mr. Miller's opinion, have assigned to it an individual from each steamship company. On its staff there should be a packing engineer, a materials handling engineer, and a staff member to coordinate the work of the bureau with individual efforts as well as to disseminate information on world-wide conditions which would affect packing of American goods.



AUGUST, 1950

Vol. 15, No. 8

CONTENTS

Packing A Punch	7
Service Minded Traffic Managers Can Cut Loss and Damage Clai by J. F. Hennessey, Jr.	ms. 9
Dip-Coating of Boxes	11
by William Rabak	
No Pilferage Loss	. 12
Dress Your Shipments Better by Charles J. Felton	13
Nine Basic Handling Problems Solved	14
"Listen, Mr. Traffic Manager"	15
New Products & Literature	16
Preventing Loss to Cargoes Part II	17
News Review.	18
Yours for the Asking	28
Traffic Reporter	29

SYLVAN HOFFMAN

Edito

IOSEPH H. FRIEDMAN Managing Editor

> W. L. NOELLE Western Manager

STANLEY R. KERMISH Eastern Advertising Manager ROBERT M. HOFFMAN Advertising Director

E. B. MEYER Production Manager

V. M. SASSI Subscription Manager

Published 10th of each month by Shipping Management, Inc., 425 Fourth Avenue, New York 16, N. Y. Telephone MUrray Hill 3-6280-1. Western Office, 549 W. Randolph St., Chicago 6, Ill. Telephone CEntral 6-5164. Sylvan Hoffman, President, Larry S. Harris, Vice-President. Publication and editorial office, 425 Fourth Avenue, New York N. Y. Not responsible for safety of manuscripts or pictures.

A HOFFMAN PUBLICATION

Subscription price \$3.00 per year in United States, its possessions and Canada All other countries, \$4.00 per year. Published in U. S. A.



MODEL 82

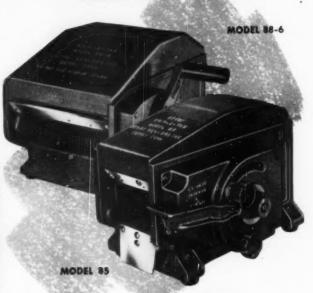
Completely new in design and operation, the revolutionary "80" series line

of pressure sensitive tape dispensers now offers speed and ease of operation never before possible! Comprised of 6 versatile machines, the "80" series dispense the toughest cloth and electrical tapes, including the new, extra strong filament tape! The Model 80 was designed primarily for tape 2" wide or two 1" wide rolls of tape . . . the Model 82 for single or multiple rolls up to 4" wide . . . the Model 85, a left or right hand operated machine, for fast production jobs requiring tape up to 2" wide and the Models 88-6 and 88-8, which dispense extra wide, strong tapes up to 6 and 8 inches wide or several narrow rolls of multiple colored tapes.



Illustrated are Model 82's in operation at the plant of the Fuller Brush Company dispensing "SCOTCH" Brand Filement Tage No. 880.

A NEW LINE OF LEVER-OPERATED
MACHINES DESIGNED TO DISPENSE
ALL TYPES OF PRESSURE SENSITIVE
TAPES INCLUDING THE NEW, EXTRA
STRONG FILAMENT TAPES!



DERBY SEALERS, INC.

Designers and Builders of Derby Sealers and Grip-A-Tab Dispensers

DERBY, CONNECTICUT



Shipping

FOR SHIPPING AND TRAFFIC EXECUTIVES 425 FOURTH AVENUE, NEW YORK 16, N. Y. AUGUST, 1950 **VOLUME 15** NUMBER 8

Service-Minded Traffic Managers Can Cut Loss and Damage Claims

By J. F. HENNESSEY, JR. Vice-President-Traffic Missouri-Kansas-Texas Lines



J. F. Hennessey, Jr., Vice-President, Traffic, of the M-K-T Railroad, has rounded out more than forty years with the railroad. He forty years with the railroad. He began in the general freight office of the Katy at Dallas in June 1910. Working his way up through the ranks, he has served with the Katy at several vital and responsible positions. responsible positions.
Active in traffic organizations

throughout the country, Hennes-

sey is well-known by traffic managers, both in railroads and industries. Energetic and resource-ful, Hennessey has aggressively pushed new educational methods for trafficmen during his long years of service.

WITH THE PROBLEM of freight loss and damage confronting the railroads today, it is vitally necessary that all concerned with packaging, handling and shipping of freight be well versed in methods of preventing this needless waste. The railroads are losing millions of dollars annually because of this costly blight on their revenue. Efficient operation of railroads today demands that every means to reduce damage to freight should be utilized.

To meet the problem properly, new educational methods are being devised to further impress upon those directly connected with freight to exercise caution in packing and handling. Railroad management is sincere in its efforts to educate and train properly for the reduction of freight loss and damage, not only for the improvement of service to patrons, but for elimination of needless expense involved.

The traffic man on any railroad should have a definite interest in the freight loss and damage problems facing the company. As one traffic man put it, "If a service is to sell consistently, it must be good service." By the use of the word "good," it would necessarily mean that the shipment must be in good shape on arrival as well as on time. Wherever there is damage to a shipper's commodity, much time is lost on the part of the traffic representative in explaining and soothing the shipper before he can broach the suggestion of another shipment. Much valuable time is lost by the shipper too.

The concern of the traffic representative over loss and damage of freight centers on two factors. It can result in direct loss resulting from the damage and the possible loss of future business from that shipper. Traffic men, working hand in hand with agents of the various freight stations, form a team which represents their railroad to the shippers.

The Missouri-Kansas-Texas Railroad is in the unique spot of serving one of the widest varieties of industries to be found. In the highy-developed industrial areas, efficient traffic departments are maintained. Here traffic managers, well versed in routing, packing, and other technical points of shipping, provide for smoother working arrangements between the shipper and the railroads. When a working organization such as this exists, the problem of getting to the heart of freight loss and damage is expedited to a considerable extent.

Firms Without Traffic Dep'ts

There have been exceptional cases in the Southwest of industries having sprung up without experienced traffic men in their organization. In these cases the traffic representatives working in conjunction with local freight house forces, can be of considerable help. The well-trained traffic man can save both the railroad and the new industry time and money by aiding in preventing loss or damage of valuable freight.

Although it is true that industry today is demanding that railroads meet the problem of freight loss and damage, a great deal of progress in this direction is impossible without the full cooperation of industry. Freight that is improperly packaged and loaded is almost certain to be damaged even with most careful handling. The railroads are, in turn, examining with a fine-toothed comb the point at which such loss or damage is actuated. The traffic man, through his contacts with the shipping public, can be of invaluable assistance in this re-examination process. For instance, when a shipper complains, it is generally to the traffic man. The traffic man then notifies the operating people.

What Steps RR's Take

Some of the steps in which the railroads, through their traffic men, are cooperating with industry for reducing freight loss and damage may be listed as follows:

- 1. Impact recorders are being used on cars of regular shipments that have had unusual damage. Through the use of these "snitchers" a car that is handled by several lines in transit can be checked and the blame placed precisely where it belongs. The impact recorders show on a tape the exact time at which unusually rough handling has taken place. This gives the traffic man of the railroad and the traffic manager of the industry valuable information in fixing responsibility for mishandling.
- 2. Traffic men keep in close touch with agents of stations that handle their solicited business in and out. By this means they keep each other informed about problems that arise in handling of various shipments.
- 3. By reason of daily contact with other shippers, a traffic man can be helpful to a new industry or one that lacks trained traffic personnel, and frequently he is in a position to supply information on proper packing and loading methods.

Since the war, the Katy has continued its policy of having its off-line, as well as on-line traffic men, tour the facilities of the Katy and the different industries served. A well-planned ten-day educational tour of infteen of the principal cities in the Southwest served by the Katy, have been arranged on which more than one hundred of the Katy's traffic men have been conducted, it was the Katy's idea that the traffic men be equipped with a more comprehensive knowledge of just what the railroad had to offer.

Freight Loss and Damage Down

Freight loss and damage on the nation's railroads in 1949 was reduced substantially under what it was in 1948. The total amount paid in claims for loss and damage last year was \$113,800,000, which was \$21,500,-



Trafficmen on the Katy have an opportunity to observe proper methods of storing and handling of merchandise. In cases where exceptional damage is possible with rough handling, impact recorders enable the trafficman to work closely with the shipper's traffic manager to locate the cause for rough handling of cars. Snitchers tell a story to all concerned with freight in transit.

000, or 15.9 per cent, less than in 1948. The number of claims filed for loss and damage in 1949 was reduced by 1,114,816, or 23.4 per cent under those filed in 1948.

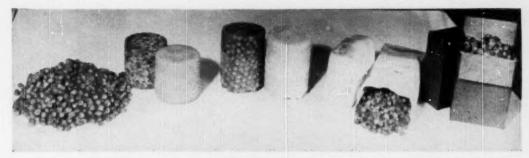
On the Katy the intensive campaign against freight loss and damage by all departments is showing results. Freight loss and damage claim payments for the year 1949 totaled \$1,093,476, while in 1948 they were \$1,316,-290. This reflects a decrease of \$222,814, or 16.93 per cent. Although quite comparable to the national average, the Katy's figures would have been even better with the exclusion of unavoidable train accident figures.

Cooperation Pays Off

H. M. Warden, vice president and general manager of the Katy, is quite conscious of the part that reduced freight loss and damage play in making the traffic man's job of selling rail service easier. Through his close cooperation with the traffic department, the traffic man is constantly in touch with the progress being made in reduction of freight loss and damage.

Progress is being made today by the railroads in their fight against freight loss and damage. As the railroads see many of their high revenue commodities being taken over by the trucks, the problem of reducing freight loss and damage is necessarily receiving more and more attention.

The traffic man has a definite part to play in the accomplishment of management's objectives to reduce claims for freight loss or damage.



Twelve ounces of loose frozen peas, compressed and dip-coated.
 Twelve ounces of peas frozen in 1 per cent brine solution.
 Twelve ounces of frozen peas in dip-coated box.

DIP-COATING OF BOXES

Now Used to Protect Frozen Foods

By WILLIAM RABAK, Chemist Western Regional Research Laboratory U. S. Department of Agriculture Albany, California

WING TO VARIATIONS in chemical and physical characteristics, thermoplastic materials vary in their protective effects. For example, refined paraffin is a very effective moisture barrier at ordinary temperatures but at low temperatures it becomes brittle, cracks, and loses its effectiveness under normal conditions of handling and shipping. However, another type of refined paraffin, i.e., the low melting point soft microcrystalline paraffins manifest excellent low temperature flexibility and at the same time are equally effective as moisture barriers. Their flexibility is improved with plasticizing agents, such as certain of the polyisobutylenes, crepe rubber and other compounds, resulting in coatings which are reasonably flexible and tough at low temperatures. These modified soft microcrystalline paraffins have been found to possess other unusual low temperature adhesion and expansion characteristics which make them suitable for the dip-coating of frozen commodities per se, such as frozen poultry or meat, or of the packages containing frozen foods. As the result, dip-coatings of this type have been in commercial use since 1946 by a large segment of the frozen food locker plant industry.

It appears that the use of thermoplastic dip-coatings for frozen foods dates back to 1941 when I began. preliminary experiments to determine the practicality of this method. A general statement on the results of this work was published in 1942 and this report was presented at the national meeting of the Institute of Food Technologists at Minneapolis, Minnesota in June of that year.

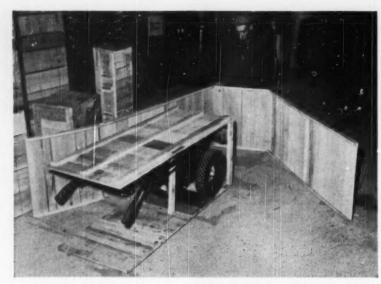
Why Work Was Undertaken

This work was in part instigated by the knowledge that heat sealing operations of protective sheet materials often caused a change in the characteristics of many widely utilized coatings resulting in the impairment of efficiency at the point of sealing. It was therefore reasoned, that if a water-vapor and air-resistant thermoplastic material could be utilized as a dip-coating, the weaknesses inherent to heat sealing could be eliminated.

The soft microcrystalline paraffins were found to supply a base material which was sufficiently flexible to resist cracking under these conditions. Due to comparatively low melting points, these hydrocarbons are "tacky" at 70°F. or above. However, at temperatures below 32°F. they become tough and firm and the tackiness recedes in proportion to the depression in temperature. Undue tackiness is also easily prevented

(Continued on Page 20)

Excerpts from an address given before the Packaging Conference of the American Management Association, New York, N. Y., at the Navy Pier, Chicago, April 24-27, 1950.



The one-piece wirebound wrap-around "mat," 182 inches long and comprising four sides of the box, has been folded and here is being placed in position to wrap around the box top and bottom.

Use of New Packing Method Results in NO PILFERAGE LOSS

Gravely Motor Plow and Cultivator Co. Dunbar, West Virginia

PILFERERS AND ROUGH HANDLING IN EXPORT SHIPMENTS are foiled by the Gravely Motor Plow and Cultivator Co., Dunbar, W. Va., so completely in its own shipping room that incidents of loss or damage are practically non-existent.

The Gravely method of packing 310-pound multiplepurpose motor farm and garden tractors and attachments is so perfected under the direction of V. D. Lippett, production manager, and Ray Fizer, shipping room superintendent, that complete protection against export shipping hazards is afforded with the greatest possible economy.

The company describes its Model "L" tractor as "the most versatile small tractor on earth." The machine is constructed with 19 different attachments, including rotary plow, reel mower, sickle mower, cultivator, snow plow, sprayer, rotary saw, and others.

Scientific engineering and custom manufacturing of wirebound shipping containers specifically for the

Model "L" motor tractor and its various attachments are credited by Lippett with a major role in eliminating export shipping pilferage and damage.

Packed Assembled

The tractor itself is packed completely assembled, in a specially engineered wirebound box and the various attachments are packed in wirebound containers designed specifically for them. Thus, upon arrival at destination, the Model "L" tractor ensemble is ready for practically instant use.

Packing a tractor requires about 15 man-minutes, including the attaching of three pieces of special pre-cut wooden interior packing to the machine and two other pieces to the bottom of the box. Four of the pieces of interior packing are nailed firmly to members of the box and hold the tractor so securely that boxes packed with tractors are stood on end.

(Continued on Page 23)

1

Dress Your Shipments Better With Smartly Designed Labels

By CHARLES J. FELTON

Author, "Layout of Advertising and Printing"

WHAT impression do the shipping labels on your cartons and envelopes make on your customers? Like a letterhead, they often create an impression of your firm, and when used properly can represent you advantageously. Good design, and effective use of color can carry a good impression of your company. Shown are ten shipping labels taken from material arriving in the mail recently. Below are some comments on their design:

- The design of this smart, two-toned brown-on-white label, is accentuated by two die-cut corners to further the simulation of a container. The lettering along the side and botton carries out the illusion. The rectangular setting of the firm name at top and right forcefully complete the effect. The calligraphic "to" seems a bit out of character, but if accentuation was the main objective, it was achieved.
- 2. Better proportions would be obtained if the black bottom band were reduced in height, eliminating that portion above the white horizontal line, and increasing the depth of the brown top panel sufficiently to increase the type size of the two lines under the sender's name. They are too small for legibility, especially as surprinted on the dark brown.
- 3. The simplicity of this black and yellow-orange label makes it effective and different, without overemphasis on design. "Advertising" might be widened a trifle to overcome its alightly condensed feeling, and to avoid dividing the label width into mathematical thirds.
- 4. There is a feeling of crowdedness in the top of the magenta band. For example, there is as much letterspacing between the characters in the main reverse line as there is in the top and side margins. If all lines were reduced in width, a more compact design would result. The two central lines in the top panel might be lowered somewhat.
- 5. The panel on which the firm name and address are reversed to accent the curvilinear pattern of the address area is effectively reproduced in a blue-gray. The star, and the surprint line at the bottom are in an orange-red. A colorful interpretation of a smart, functional design.
- 6. The simplicity of condensed Gothic, reversed on a solid, rich red-brown background, creates a straightforward functional design, which gets relief by the devices of curves in the brackets and the script "For."
- 7. By a bit more imaginative re-arrangement of the formally centered type groups at the left of this blue and black label, and more consistency in type selection, this layout could be improved. More contrast in the blue against the black also would be desirable.
- 8. Nicely arranged to attain effective informal balance of elements, this black-on-white label attains distinction by avoiding boldness and by adherence to a simple, dignified pattern. Excessive word and letterspacing could be avoided in the firm name line by choice of a less condensed type style.
- 9. Completely hand-lettered by an expert, the reverse brown panel expresses utmost contrast in display of the firm's logotype, balanced by a dignified, yet affective rendering of other essential elements. It exemplifies the advantage that top-notch lettering often has over conventional type patterns.

10. This label, reproduced in golden tan on a lighter buff stock, balances top and bottom elements effectively in a simple, formal arrangement. A bit more "air" around the top main line might obviate the crowdedness as with the number 4 specimen.

Cut & Captions Courtesy Modern Lithography







Norwich uses a hand-power truck to remove palletized unit loads from highway truck in inter-building shipment. Manual unloading formerly used was slow and tedious, and resulted in damaged merchandise, erroneous counts, and confusion in storage and order picking.

Story & Photos Courtesy Automatic Transportation Co.

Simplicity of mechanical handling eliminates an old problem at
Norwich Pharmacal Company, mixed up or impossible-to-locate
stock. With honeycombing gone, inventories and order picking
are improved considerably, stocks are kept at the desired level,
and rotation of goods according to age is made possible. Before
use of hand power truck, products frequently were left to become
overage and had to be destroyed.

Nine Basic Handling Problems Solved Through Installation of Power Trucks

Norwich Pharmacal Company

DON'T UNDERVALUE the hard-to-measure "extra" dividends of modern materials handling.

This counsel is based on the attitude of The Norwich Pharmacal Company, New York state drug firm, where a 20 per cent reduction in manpower assigned to handling is rated as less noteworthy than other handling achievements.

Norwich, of course, is happy about the appreciable dollar saving. But it aimed for more than that when it installed materials handling power trucks. Here are the problems Norwich set out to lick and did:

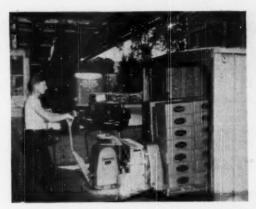
Problems Solved

- Loading time has been reduced to a minimum.
- Breakage, which was high, has been practically eliminated.
- 3. Pilferage is practically impossible now.
- Quantity counts are now accurate, and coincide with warehouse counts. They used to be inaccurate.
- Manual handling, in the past unnecessarily repeated, has been reduced to

- just two instances—palletizing incoming materials and finished products.
- Storage space was wasted under the old system. Now it is efficiently used, and honeycombing no longer exists.
- 7. Order filling used to be impeded when the company ran out of stock because of wrong counts, or items were misplaced. Today, all items are easily accessible to order pickers. Goods move out of stock to order assembly lines in unit loads.
- Inventories, once difficult to make, and inaccurate, have become simple. Counts are correct.
- Stock can be rotated easily now, and older stocks are accessible to the order picker. This was not true in the past.

Buildings Widely Separated

Some operations at Norwich are located in buildings a considerable distance from the main manufacturing site. Storage and shipping are in a multi-story ware-



With its new system, the Norwich Pharmacal Company can load a semi-trailer, drive it six city blocks from the manufacturing plant to the warehouse, and unload it in about 20 minutes. Speedy handling is accomplished by Automatic Transportation Company operated power trucks and hand-power trucks. Under recently discarded method, trucks loaded manually in the morning were not unloaded at the warehouse until the next day.

house about six city blocks from the manufacturing and packaging plant. Virtually all products must be moved to the warehouse, where they are made up into orders and shipped to customers and branch warehouses throughout the country. Transfer of goods between buildings is by company-owned highway type semi-trailers.

Formerly, cartons were fed to semi-trailers at the loading dock by a roller conveyor. This conveyor received finished goods from six packaging lines, each handling a different item. Because the lines operated simultaneously, cartons of various products were mixed in the make up of the trailer load.

Formerly used Manual Loading

The employee loaded cartons manually, one at a time, into the trailer. Paid on an incentive plan according to the number of cartons loaded per hour, he strived for rapid loading. With varying products involved, and because of the conditions under which he worked, the loader's count was unreliable.

Weather also was a handicap. During cold weather, which prevails seven months of the year at Norwich, loading was interrupted frequently because the man had to go indoors to get warm.

When the trailer reached the warehouse, it was unloaded manually. Cartons were separated and piled on skids according to the products they contained. The count at this point never agreed with the loader's count, presenting a constant source of disagreement between warehouse, production department, and the loader himself.

In an ordinary day four trailers moved from manufacturing to the warehouse, two in the morning and two in the afternoon. Manual handling produced a serious time lag in unloading at the receiving point,

(Continued on Page 22)



A FRIEND OF OURS, Traffic Manager for a large concern, recently had a problem involving parcel post shipments. Because of an accumulation of back orders he had to ship over 600 identical pieces of parcel post per day to certain territories, whereas has shipping facilities normally carried only 100 pieces per day. Furthermore, these had to be shipped within a specified period of time, the only stipulation being that he start shipping the most distant points first and work eastward, his concern being located on the east coast.

His first innovation was to eliminate a packing slip. On orders that again were to be back ordered, a slip, printed form, was inserted stating that the shipment was only a partial. Where the quantity was exactly what consignee had ordered he figured that no packing slip was necessary. This enabled the shippers to pack quickly, using only shipping labels and form, in effect, a mass production assembly line.

Now he streamlined the actual packing and shipping operations. First he set up sections of skate conveyor on the shipping bench and using men as packers had them feed the conveyor which ended at what he called the "postage operation." One man, at this station, did nothing but affix postage and load mail hampers with the pieces coming down the line. At this point, where all pieces were identical, the labels were also put on.

But another, and more serious problem arose. Shipping first to the west coast, state by state, the problem of zoning was easy. All were in Zone eight so consequently stacks of metered stamps of the same denomination were run off and one put on each parcel. By the same token, where these shipments were FOB plant, the head shipper merely took the orders as a pile and wrote in the same postage on each. This meant that not only could all these pieces be run down the line at once, but the orders could all be processed at once, making a fast and economical operation.

But the problem arose when states like Ohio, Kansas, esc. came to be shipped because much of the state would be in one zone while the rest of it would be in another. Consequently, if all orders were processed at once the T.M. would run into the problem of shipping to a city in zone 5 and yet charging the customer for zone 6. On the other hand if he put all zone 6 postage on every piece and charged for only zone 5 it might be a costly operation.

At this point the Traffic Manager sat down and (Continued on Page 25)

NEW PRODUCTS



& LITERATURE

WATERPROOF PAPER

A strong, tough, non-deteriorating, water proofpaper called "Glas-Kraft" will soon be available for general use. Alldirectional reinforcement comes from continuous glass fibers swirled between two plies of finest specification kraft and then bonded under heat and pressure in a special waterproof, all-weather laminant. (Up to 315 ft. of selected glass yarns go into each square foot of Glas-Kraft.)



Hard to puncture and almost impossible to tear, the new paper is considerably lighter, smoother, and more pliable than other papers. It is said to be the most waterproof reinforced general purpose paper made. There are three standard grades available in rolls or sheets up to 96 inches in width.

A large part of present production is absorbed by the U. S. Government for the packing, shipping and storing of military supplies and equipment. steel industry is also a big consumer. Some is used in the form of joint and sealing tape by the corrugated container industry. The rest goes to meet an everincreasing demand in many fields.

HYDRAULIC TAILGATE LOADER

A hydraulically powered tailgate loader for pickup trucks, called the Lift-O-Matic, has been developed by the National Lift Co., subsidiary of Gar Wood Industries,

The Lift-O-Matic can easily be installed on most pickup trucks. Its lifting capacity is 1000 pounds. The hydraulic power is provided by a fan-belt driven hydraulic pump with its own self-contained clutch. The pump operates only when lifting power is needed.

One handy control, installed on the Lift-O-Matic, is used for either raising, holding or lowering the tailgate. The operator can operate the unit while riding up or down with the load.

The Lift-O-Matic is all steel and sturdily constructed. When it is not being used to load or unload the truck, it can be level-locked at the truck body floor level, or it can be swung up and securely locked, acting as a regular tailgate. A safety bypass valve in the hydraulic pump prevents overloading and endangering the hydraulic system.

TYING MACHINE DEAL

A Chicago manufacturer has come up with a carton for 25-lb. coils of tying wire that serves the double purpose of both protecting the wire, and providing a convenient, speedy wire dispenser in the shipping room.



Up to now much of the tying wire used for wire-tying cartons, crates, bundles of all types, down to parcel post size packages, has been delivered without wrapping or protection. The Inland Wire Products Company, however, inserts 25-lb. coils into a heavy fibre-board shipping carton for use with their new Inland Model D Wire Tying Machine. The top of the 1214" square, 212" deep carton is perforated for a 712" diameter opening.

On delivery, the perforation is easily broken. This exposes the loose end of the coil. The operator simply draws the wire out of the carton as needed. The wire feeds smoothly, without tangling and the coil remains flat and intact.

An extra-heavy, plated, wrought iron rod, formed into a U-shaped stand is also furnished with the new Inland carton. Inserted up the back of the carton, it holds the container firmly at a convenient 45° angle. The carton and stand can be placed in any desired position on the floor, up on the shipping table, or suspended from the wall.

The stand holds the carton 14" off the supporting surface, away from moisture, dirt or grease-thus, the wire remains clean up to the time it goes in the tying

machine.

NO PILFERAGE

Companies troubled with pilferage of their cartons will be interested in a novel carton manufactured by the Robert Gair Co., Inc., to pack the Delson Candy Co's five flavor mints. Previously the firm's customers had to seal the box with clear

If you wish more information about the products mentioned in any de-Repeated in the product of the second of the

Companies having new product stories should send them to the same

tape to prevent pilferage. Carton has now been modified with cut-out tab in bottom which permits sealing of cover to bottom after packing, thus preventing pilferage.

Another feature of the package is the printing of cooking recipes on the bottom of the package. It seems that mints can be used in making many dishes. The printing of such recipes is a novelty in the candy field.

NEW PALLETS FOLDER

Available now, for the asking, is a new, interesting and colorful folder containing illustrations and descriptions of the many advantageous aspects of 4-Way Pallets.



There, simply and graphically outlined, you will find the types of pallets available. their advantages, and the materials handling operations best performed through the use of 4-Way Pallets.

This comprehensive brochure should prove indispensable to all materials handling men with a view to saving time, labor and money. Write this department.

ENVELOPE SEALER

A new office aid for sealing envelopes, moistening labels and similar work rolls on just enough water to moisen flaps or labels without washing off the glue. A slight squeeze of the flexible Bakelite polyethylene tube starts water flowing into the sponge roller by capillary action, and it continues to flow at an even rate as the sealer is moved across adhesive surfaces. Bakelite polyethylene is resistant to ink, grease and most chemicals. The roller is housed in a plastic fender which prevents it from touching and wetting papers on which the sealer may be laid. Product is made by Northeastern Plastics,

MATERIALS HANDLING HANDBOOK

Handbook of Material Handling with Industrial Trucks: A 72-page, practical guide for the analysis of material handling operations and the application of the unit-load method with power-operated industrial trucks and accessories, has just

(Continued on Page 19)

* Preventing Loss To Cargoes *

Through Good Packing Procedures

Part II

(Continuing the extract from "Ports of The World, 1950," published by "The Insurance Company of North America." Claim recoveries and handling methods are discussed in this section.)

Improve Handling Methods

HANDLING AND STOWAGE can be improved by shippers selecting those steamship companies, other carriers, forwarders and customs brokers who show a definite interest in loss prevention. Some offer superior service. They deserve your support and you will benefit by better delivery of cargo.

Some tests of a good carrier that can be developed by inquiry are:

- (a) Does the company have a department or individual charged with the responsibility of cargo loss prevention?
- (b) Does it provide special guard service?
- (c) Does it provide locked or guarded areas or cribs for valuable cargo or damaged containers at its own or leased piers or terminals?
- (d) Does it provide special stowage for valuable cargo and what does this consist of?
- (e) Does it provide special gear for loading and discharge of different types of cargo requiring special handling?
- (f) Does it provide a system of forced ventilation of conditioned air to prevent condensation of moisture within the hold, known as "sweat" damage?
- (g) Does it properly receipt for goods delivered to it and accept reasonable receipts for goods delivered by it or does it attempt to evade responsibility by unusual clauses or exceptions in bill of lading or notations at delivery?
- (h) Does it have a fair claims policy and accept responsibility for loss or damage that may reasonably be attributed to improper, handling, stowage or protection?

Use the carriers that best meet these tests and the forwarders and customs brokers who supervise your cargo and prevent delay and unnecessary exposure.

Make Necessary Claims

CLAIMS RECOVERIES from carriers and other cutodians of cargo who may be responsible for loss or



Water-soaked, badly damaged packages. Whatever the cause American interests suffered.

damage reduce the net loss to the insurer and lower insurance cost. Furthermore, fixing responsibility for loss or damage is the surest way of promoting an interest in preventing future losses. Those who do not pay usually do not care. Suggest the following to your consignees:

- (a) Report loss or damage to your insurer's claims agent immediately loss or damage is discovered and invite carrier to attend survey. If discovered on dock, have survey made there without delay. Follow instructions of the claims agent.
- (b) File claim against carrier without delay, even though full extent of loss or damage is not apparent. Details can be supplied later.
- (c) Do not permit carrier to delay investigation of and payment of losses for non-delivery of cargo beyond time limit for suit. Report full circumstances to insurer's claims agent well before expiration of time specified by conditions of bill of lading (usually twelve months).

Co-operation in claims recovery efforts will reduce cost of insurance.

General

Shippers and consignees will serve their best interest in the long run if they make every reasonable effort (Continued on Page 21)

R. D. HANDLEY TO HEAD EXHIBITORS' COMMITTEE OF AMA PACKAGING EXHIBITION

• The American Management Association recently announced the election of Robert D. Handley, advertising manager, Sylvania Division, American Viscose Corporation, New York, as chairman of the Exhibitors' Advisory Committee of the 20th National Packaging Exposition.

The Exposition is the annual market place of the \$7,000,000,000-a-year packaging, packing and shipping industry. More than 240 packaging machinery, material and equipment suppliers exhibit new developments at this annual event. In his new post Mr. Handley will be in charge of arrangements for the Exposition which will be held in Atlantic City, New Jersey, April 17-20, 1951. At this year's show, held in April in Chicago, more than 19,100 representatives of all kinds of American business and 21 foreign nations viewed the latest developments in packaging, packing and shipping.

Mr. Handley will serve with Paul O. Vogt, recently elected AMA vice president in charge of packaging. Mr. Vogt is coordinator of package engineering and development, General Electric Company, Schenectady, New York.

CORROSION SHORT COURSE SCHEDULED AT CLEVELAND

• Nine lecture periods, with adequate time for discussion have been scheduled tentatively at Cleveland, Ohio, for the Case Institute of Technology corrosion short course to be held September 25-29, under direction of Dr. R. B. Hoxeng. Dr. Hoxeng reports the lecture course is designed as a refresher for those actively engaged in corrosion prevention, yet will not be too advanced for those just entering the field.

Authorities in the field of corrosion and corrosion prevention who have accepted are F. L. LaQue. The International Nickel Co., Inc., New York; Dr. R. B. Mears, Carnegie-Illinois Steel Corp., Pittsburgh, Pa.: H. A. Robinson, Dow Chemical Company, Midland, Mich.; Prof. Mars G. Fontana, Ohio State University, Columbus, Ohio and Professors W. von Fischer, E. G. Bobalek and R. B. Hoxeng of Case Institute. Of the lecturers, Mr. LaQue and Dr. Mears are past presidents of the National Association of Corrosion Engineers; Dr. Fontana is chairman of the NACE technical practices committee and the others are noted for their contributions to corrosion science.

The Case Institute course is the second such undertaking in which NACE has cooperated, the first being at the University of Texas, Austin in September, 1949. Case lectures will be given two daily except Friday during the week.

WESTERN PACKAGING INSTITUTE ATTRACTS CAPACITY CROWD

◆ Capacity registration spelled success at the Western Packaging and Materials Handling Institute held in Founder's Hall, University of Southern California, Los Angeles, June 12-15.





Top: L. to R.: C. G. Cunningham, v-p, SIPMHE; Dr. L. R. Guild, Head, Dept. Management, College of Commerce, USC; J. R. Huffman, Prof. of Industrial Engineering, USC: and C. J. Carney, Jr., Man. Director, SIPMHE.

Above: C. L. Lippman, Columbia Steel Corp., San Francisco, conducts one of the divisional meetings.

Staged jointly by the Society of Industrial Packaging and Materials Handling Engineers (Southern California Division) and the University of Southern California (Department of Industrial Engineering and Extension Division), total registration was 165 persons. Eighty persons registered for the full course, 40 for daily attendance, and about 50 undergraduate students of the University attended all meetings free of charge.

Forty-three (43) lectures in all were conducted under the co-chairmanship of John R. Huffman, Professor of Industrial Engineering, USC and Gale C. Cunningham, Vice-president of S.I.P.M.H.E. and Packaging Engineer for North American Aviation, Inc., Los Angeles. This is believed to have been the first packaging and materials handling educational forum ever staged west of the Rockies.

MARSH STENCIL TO EXHIBIT AT INTERNATIONAL TRADE FAIR

 Projected to promote world trade, world prosperity and world peace, the First United States International Trade Fair will be held in Chicago, August 7 to 19.

Endorsed by the International Chamber of Commerce, the \$15,000,000 International Trade Fair will bring together goods from more than forty nations for the selection of thousands of buyers from the United States and the world, under the most favorable conditions for business transactions. The Fair will be held in four of the largest eshibition buildings in Chicago; the Navy Pier, the International Amphitheatre, the Coliseum, and the Chicago Arena.

The Marsh Stencil Machine Company of Belleville, Ill. U. S. A., which has sales representatives in all large cities in the U. S. A. and in a number of foreign countries, will be among the leaders in the marking devices industry to exhibit its products on the world-wide market. The Marsh Exhibit will be in Booth F-166, Group 9, Navy Pier. Stressing the slogan, Marsh Stencils Deliver the Goods, the exhibit will display Marsh electric and manually operated stencil machines, fountain markers and stencil inks, fountain brushes, all important items for the proper and economic marking of freight and export shipments.

ADDRESSOGRAPH-MULTIGRAPH NAMES I. B. WARD GENERAL MANAGER

 J. B. Ward was recently announced as Vice President and General Manager of Addressograph-Multigraph Corporation, Cleveland manufacturers and International distributors of production machines for business records, by the corporation's President, George C. Brainard.

Ward has been with the company 38 years. In 1944 he was called to the home office as Vice President in charge of Addressograph-Multigraph domestic distribution, the position he held until his appointment to the general managership. He holds the company's all-time record of 23 earned memberships in the Hundred Club, the company's international honor organization for top salesmen.

CHARLES HAMMEN APPOINTED TO MID-STATES SALES STAFF

Mr. Irving McHenry, President of Mid-States Gummed Paper Company, has announced the appointment of Mr. Charles Hammen, formerly with the Ecusta Paper Corporation of Pisgah Forest, North Carolina, as a specialty contact man of the New Products Sales Staff.

Mr. Hammen has a wealth of background in Technical and Specialty Papers and a wide acquaintanceship in the paper trades, having been associated with the Paper and Paper Products Division of the War Production Board. He will spend all of his time in the field introducing new products to the consumer and following thru with Mid-States field representatives in increasing new products sales volume.

KIMBERLY-CLARK WINS INFORM-A-SHOW AWARD

♠ An award for the "Most Informative Exhibit" was presented to the Kimberly-Clark Corporation of Neenah, Wisc., at the Inform-A-Show of the National Association of Purchasing Agents convention at Cleveland, Ohio, in June.



Exhibits in the 1950 Inform-A-Show were pronounced as outstanding on the whole by the award committee. The diversity of products and processes featured was great, and the educational value of informative presentations attracted unusually high attendance of purchasing and production executives.

MUNITIONS BOARD PACKAGING INDUSTRY ADVISORY COMMITTEE HOLDS ORGANIZATION MEETING

 The Munitions Board Packaging Induscry Advisory Committee, which was retently established to give the industry



viewpoint in the solution of military packaging problems, held its first meeting in June, in the Pentagon, Washington, D.C.

This first meeting was given over largely to organization, laying the ground work for its relationships with the Munitions Board's Joint Packaging Committee, with which it will work closely, and a discussion of how the Advisory Committee can best function.

A first action of the committee was to elect Neil A. Fowler, Director of Sales and Research, General Box Company, Chicago, Ill., as Industry Chairman. Heinz H. Loeffer, President, Exeter Paper Co., Inc., Chicago, Ill., was elected chairman of the Planning Subcommittee. This committee was asked to draft a statement of general policy and action, with the assistance of Munitions Board representatives. This is to be presented at a meeting of the full advisory committee in the fall of this year. Rear Admiral Morton L. Ring, USN, Director of Supply Management, Munitions Board, is Government Chairman of the committee

The Packaging Advisory Committee is an outgrowth of the former Packaging, Storage, and Materials Handling Industry Advisory Committee. The packaging portion of this committee was separated to form a full committee. In the formation of this committee, the field was divided into methods of packing, materials to be packed, and methods of transportation. Members were then selected from these specialized categories.

NEW LOCOMOTIVES INSTALLED SETS 27 YEAR RECORD

 American railroads installed more new locomotives in the first six months of 1950 than in any corresponding period since 1923, the Association of American Railroads announced today.

The number installed in the first half of 1950 totaled 1,127, which included 1,122 diesel and 5 steam locomotives. They put 205 new locomotives in service in June, of which 204 were diesel and the other one was steam. New locomotives on order on July 1 totaled 1,000, which included 973 diesel, 23 steam and 4 electric.

Class I railroads and railroad-controlled private refrigerator car companies had 40,122 new freight cars on order on July I this year. These included 21,196 box cars, of which 20,696 will be general service box cars and 500 will be equipped for special commodity loading; 1,612 refrigerator cars; 8,516 gondolas; 2,810 covered hoppers; 4,650 ordinary hoppers; 496 stock; 50 flat, and 794 miscellaneous freight cars. Railroads will build 18,186 of the cars in their own shops and 21,936 will be constructed by carbuilding companies.

NEW PACKING PLANT UNDERWAY ON INDUSTRIAL CANAL

◆ Construction of a \$500,000 cement storage and packing plant on the Industrial Canal will begin immediately, it was announced recently by Robert L. Simpson, president of the Board of Port Commissioners. The Ideal Cement Company, (Continued on Page 29)

What's New

(Continued from Page 16)

been published by the Electric Industrial Truck Association.

This book, entirely new in text, illustrations, charta and diagrams, together with engineering data, supplants the former Materials-Handling Handbook, also published by EITA, which ran through six editions and which was regarded as the standard authority on material handling practices employing industrial trucks.

Divided into four sections, the Handbook of Material Handling with Industrial Trucks contains; 1) The Evaluation of Industrial Truck Handling; 2) Material Handling Management, with sub-sections devoted to the preparation and use of flow process charts, handling operations in production, handling in storage, the use of unit loads in storage, with layouts, commodity and capacity factors, etc.; 3) The Organization of an Industrial Truck System and, 4) Practical Truck Engineering.

LABEL PASTER

An attractive office model, motor-driven label paster is a new product of Potdevin Machine Co. The "Mini-Labeler" is sturdily constructed of metal and finished



in crackle-green to blend with any office furnishings. A great aid in stepping-up office efficiency wherever edge or over-all gluing is required.

Any inexperienced operator can turn out ten times the work in one hour compared to hand labor. And there is no danger of the glue oozing at the edges because the machine is adjustable to apply the desired amount of adhesive to the work while the ungummed side remains perfectly clean.

Interchangeable heads are designed for cold glue application of a ½ inch margin or over-all pasting of labels up to 4 inches wide and any length. Changeover from one head to the other is made in a few minutes.

Both reservoir and coating roller are made of bronze to avoid any possibility of corrosion and to permit simple removal of paste when cleaning. The "Mini-Labeler" measures 8" wide x 12" long x 73'2" high. Light enough in weight to move to any convenient spot.

BLUE BOOK OF PACKAGING

Shipping Reinforcement from A to Z by means of Round Steel Strapping is available in a new and revised 24-page Gerrard "Blue Book of Packaging" which may be obtained free by writing to that company on your letterhead, or to this department.

The "Blue Book" contains nearly 150 (Continued on Page 29)

The it tight ...that means GERRARD

Tight as tight can be... that's the kind of tie you get when you use the Gerrard method of strapping. Gerrard Steel Strapping is round... that's why it clinches evenly at the corners and distributes the stress evenly through its diameter. Danger of breakage... and damage claims, too... are sharply reduced. Packages remain neat and firm from plant to destination.

Gerrard machines and strapping, in a wide range of sizes, can be used to tie small parcel post packages, heavy pallets or carload lots of steel pipe, plate and timplate.

And Gerrard Round Steel Strapping costs about 40% less than any other metal reinforcement

Write for a free copy of Blue Book of Packaging. And consult a Gerrard engineer about your packaging problems. His services are available free of charge. Garrard Steel Strapping Company, 2909 West 47th Street, Chicogo 32, Ill.



Twenty-five heavy rough forgings are strapped into one secure unit to permit easy handling with a magnet crane. Three Gerrard Round Steel Straps hold each busdle firmly.



Gerrard Round Steel Strapping is adaptable to a wide variety of applications. Model TE is used to bundle stove pipe into a firm, neut package that is easy to handle.



Model Q is somi-automatic. Operator just drapes Gerrard Round Steel Strapping around the carton and presses thumb lever. The machine tensions the strap, forms its own twisted seal, cuis the strap neatly, and sets the strapping for the next operation. Above, one strap secures bread cartons.



GERRARD ROUND STEEL STRAPPING

UNITED STATES STEEL

Dip-Coating of Boxes

(Continued from Page 11)

by spraying the dip-coated item under controlled conditions, with a thin coating of clear lacquer, which also serves to enhance the finish and appearance. When mixed in correct proportions with certain compatible modifying compounds previously mentioned, the resulting blends have general characteristics which are satisfactory over a wide range of temperature. They meet the requirements for food products in that they are non-toxic, insoluble, and have no taste or odor. The attractiveness of hydrocarbon coatings such as these, may be materially increased by coloring the melt with oil-soluble permitted food dyes. This feature is valuable for identification or trade-mark purposes and in no way impairs the functional value of the coating.

Brittleness of coatings, being a major pitfall at lower temperatures, must be specifically evaluated. While many laboratory tests have been devised to determine relative flexibilities of materials, a practical method such as the impact or drop test is a convenient and reliable way of testing this characteristic.

Since continuity of the surface film is more important than thickness of coating, it was found advantageous to strive for thin coverings. Coating thickness may be regulated by, first, the temperature of the molten thermoplastic, second, the timing of the "dwell" of the dip and, third, by repetitive immersions. A dipping temperature maintained at + or-15°F, above the melting point of the thermoplastic usually results in the deposition of a suitably uniformly thin film after immersion for one second. Should bare spots remain, a second dip may be necessary. Coatings over 2 millimeters thick (0.0078 inches) are undesirable because of decreased flexibility and unjustified increase of the cost factor. In the absence of "bare" spots, coatings 0.5 mm, thick were found to be effective in watervapor and gas resistance.

Coatings are easily removed from the dip-coated items by peeling or "stripping." In the case of frozen commodities slight thawing develops a film of water between the coating and the frozen material which serves as a lubricant enabling the easy removal of the covering in cast formation.

The "Enrober"

Mechanization is an important factor which must be given careful consideration if the package is to be utilized by industry. During the war, the armed forces used a type of dipping mechanism which involved the passage of the containers or commodities through a molten bath of the thermoplastic on a chain. A more recent proposal has been the use of a type of equipment used in the confectionery and allied industries, which is known as an "enrober," so-named because the commodity to be coated is "enrobed" by a molten sheet of the coating applied through a slot from above a moving belt. With the enrober, thickness and evenness of the coating may be regulated by blasts of hot air applied from appropriate angles and hardening may be expedited by passage through a refrigerated cooling tunnel.

Dip-Coated Paperboard Containers

A recently completed packaging study carried out at the Western Regional Research Laboratory permitted accurate evaluation of dip-coated paperboard containers in connection with the packaging of frozen foods. The containers were of the end opening type having a capacity of twelve ounces. After filling with frozen peas, the end flaps were anchored with microcrystalline paraffin. The closed cartons were then hand-dipped in a paraffin-base thermoplastic under controlled conditions resulting in the deposition of a reasonably uniform surface coating 11/2 to 2 millimeters thick. These containers were then stored in dry circulating air at 15° and 0°F, in specially designed sealed cabinets. Only insignificant weight losses occurred over a two year storage period at either temperature indicating the efficiency of this type of barrier. Further corroboration of the protection afforded these frozen peas by the dip-coated container was verified by standardized taste panel tests.

While this presentation has been more or less confined to the hydrocarbon type of thermoplastic, it should be emphasized that this is only one of many types which are amenable to the dip-coating procedure. Any thermoplastic compound having protective chemical and physical characteristics which meet the requirements of any specific product may be utilized.

Therefore, it is of prime importance that the type of thermoplastic coating selected for a given commodity be tailored to the requirements of that product. The possibilities are legion. Only the surface has been scratched in this new but promising field of protective packaging.

Loss to Cargoes

(Continued from Page 17)

to reduce the extent of loss or damage by taking immediate steps to protect against further loss by whatever means may be practicable. A leaking barrel should be recoopered, wet cargo reconditioned without delay, as recommended by the surveyor, and assistance should be rendered in disposing of unacceptable cargo through channels that will produce the least loss to the insurer. There are many ways in which loss can be minimized, and the best general rule is to have the claimant act as though he were a prudent uninsured owner of the cargo.

Prepared by the American Institute of Marine Underwriters and adopted by the International Union of Marine Insurance as part of their "Recommendations for Cargo Loss Prevention."

Eighty-seven per cent of America's trucks are privately owned; 13 per cent are operated for hire.



WATERPROOF PAPER REINFORCED WITH GLASS

Yes, you can even wrap a rhinoceros in this amazing, new glass-reinforced, non-deteriorating, waterproof poper. Light as it is, smooth as it seems . . it's probably just about the toughest thing you've ever come across in the way of paper.

Hard to puncture and almost impossible to tear, GLAS-KRAFT can provide your products with positive all-weather protection from your shipping room to the other side of the world.

When you want a paper for wrapping, shipping or storing anything from adding machines to zeolite. . . When you want a paper that performs where others fail . . . Specify and order Glas-Kraft. Only Glas-Kraft can give you so much for so little. Glas-Kraft is available in rolls and sheets up to 96 inches in width.

OTHER GLAS-KRAFT PRODUCTS

0

GLAS-ERAFT SEALING TAPE
For Carton Glocares.
Five times stronger than ordinary sealing topes. Will not cut file carton, less the place of stripe, rose, wire

GLAS-TAPE with Darex Resin Smulsion Adhesive, makes the manufacturer's joint on your carton completely weatherproof. The creped outer surface minimizes the joint Isself. Buy your boxes laped this modern way.

Glas-Kraft has amazing all-directional strength because it contains up to \$15 ft, uf continuous, specially treated absers swifed before the special continuous and special stream of the special continuous and special continuous cont



A Better aper Product By



Trade Mark of
GLAS-KRAFT, Inc.

Write Inday for some a sent for



TO OPEN YOUR CARTONS

DOES THE RECEIVER HAVE THE FACILITIES TO OPEN YOUR CARTONS

ARE YOU COMPLICATING HIS OPER-ATION BY USING CUMBERSOME SEALING METHODS

PLAY SAFE WITH GUMMED SEALING TAPE

IT OPENS AS READILY AS IT SEALS AND GIVE YOUR CARTONS REINFORCED PROTECTION.

SEAL THE RIGHT WAY WITH ON-TO-STA SEALING TAPES

WRITE FOR FREE SAMPLE BOOKLET

ATLANTIC GUMMED PAPER CORP.

BRANCH OFFICESS PHILADELPHIA . PITTSBURGH CHICAGO . BUFFALO . BOSTON . HAVANA

HA

Nine Problems Solved

(Continued from Page 15)

necessitating special pick up trips for short stock items to complete shipments.

Confusion Causes Pilferage

Confusion in counting cartons made pilferage from trailers simple. It was impossible to check.

At the warehouse, cartons were placed on skids manually and hand lift trucks took them, via elevators, to upper floors. In storage areas cartons were removed from the skids and stacked manually on the floor. The reverse of this procedure was used in picking orders for shipment.

Shifting stock by hand was slow and tedious, so there was a tendency to honeycomb. Rotation of stocks according to age was difficult and costly. Inventories were a laborious problem with this type of storage.

Palletization and Power Trucks

Norwich's answer was adoption of palletization, with unit loads handled by powered lift rucks. For handling equipment, the company selected power trucks of two other types, because limited floor capacities prohibit use of fork trucks.

The new system eliminated the truck loading conveyor. Merchandise coming off the six packaging lines is palletized at the end of the line in unit loads according to a specific count and pattern. When the trailer trucks are ready, pallet loads are placed in them in a few minutes by a power truck.

Counting Now Accurate

Counting has become accurate, because the loader now counts eight or ten pallets, rather than three to five hundred individual cartons.

At the warehouse, pallet loads are transferred from the dock to storage areas by another type of power truck which tier them higher than they were stacked by hand.

It now takes only about 20 minutes to load, transfer, and unload a trailer. In the past, a truck loaded one morning would not be unloaded until hours later. Stocks can be kept at a predetermined level for quick order picking, and special rush trips have been elimimated.

United Loads

Merchandise leaves storage still on pallets, and shipments to branch warehouses also are in unit loads, avoiding the problem of breaking up a palletized unit.

In storage, shifting of goods is simplified, and there is no longer occasion for honeycombing, misplaced stock, overage merchandise, and inventory errors.

At Norwich the vastly improved system of storage and distribution is valued highly, as well as the elimination of wasted manpower.

No Pilferage Loss

(Continued from Page 12)

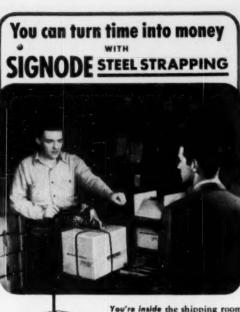
A completely assembled tractor with interior packing attached is rolled onto the bottom of its wirebound export shipping box, the top of the box is placed in position and nailed to the interior packing, and the 182-inch long one-piece wirebound wrap-around "mat" comprising four sides of the box is folded into shape and placed in position. Its outside cleats snugly engage the outer edges of the top and bottom of the box. A few nails securely join together the three members of the container.

Resiliency and Shock Absorbence

Lippett asserted that the wirebound construction of the export shipping containers provides a high degree of resiliency and shock absorbence that is not present in more rigid types of containers and that protects the contents from shocks and jars. Also, he said, the wirebound boxes are engineered to withstand stacking with no danger of the bottom boxes collapsing from the weight above.

Pilferage has been completely thwarted, Lippett added, by the completely closed nature of the container and the imposibility of entering it without cutting the binding wires, which cannot be done without quick detection.





You're inside the shipping room of one of the most progressive manufacturers in the country a typical Signode customer.

The time is several years ago when this manufacturer called on Signode for recommendations on improving his packaging and shipping methods.

The profitable idea to be gained is this: Beginning with the scene pictured above, where a trained Signode representative is instructing an operator in the proper use of a modern strapping tool, this manufacturer changed his shipping function from a "red ink" operation to one that pays dividends in speed, economy and customer good will.

If yesterday's practices are costing you money...in wasted materials, false motion, or time...it will pay you to get in touch with Signode—regardless of what or where you ship.

MAIL COUPON FOR DETAILS

Signode Steel Strap 2631 N. Western A		7, TIL
We ship Signode's 6-Point 5		Send me details on oing Protection.
Name	***********************	Title
Company		
Address	*******************	*****
City		State
THIS SEAL MEANS	SIGNODE	SECURITY IN SHIPPING

Keep production on the move with

POTDEVIN

Conveyors



Teday the trend is toward automatic movement of meterials from stock room to shipping deportments. unproductive personnel to more prof-Itable positions. POT-DEVIN Conveyors are used for light assembly work and in sorting inspection and packing departments. Installation is simple. Belt speeds are adjustable. Meny POTDEVIN Straight-Line Conveyors ere perteble giving you greater flexibility in plant leyout. Write for complete literature.

POTDEVIN MACHINE CO.

1208 38th St., Brooklyn, 18 N. Y.

Designers and manufacturers since 1893 of equipment for Bag Making Printing Coating Gluing and labeling



* *

NO GUESSING WHEN SHIPPING

With

LEONARD'S GUIDE

PARCEL POST - EXPRESS FREIGHT

Rates and Routing
Information



"THE SHIPPER'S CYCLOPEDIA SINCE 1917"

Some of it's Many Features:

*INDEXED BY STATES

*LOOSE-LEAF

*QUARTERLY SUPPLEMENTS

*FREQUENT REVISIONS

LEONARD'S GUIDE sesset be good. Over 19,000 (ABC count) satisfied users endorse it. Phone or write for your copy now,

G. R. LEONARD & CO.

81 MADISON AVENUE NEW YORK 16 125 N. WACKER DRIVE CHICAGO 6

Impacto-graph Tested In Long Haul Air Flight

Ability of an Impacto-graph machine to record impacts and movements of crates in transit was checked recently by Pan American World Airways which flew a shipment over its regular routes around the world.



Packed in with an electric addressing device is the testing machine which was used to record all impacts sustained by the crate in which the device was packed, as well as all movements of the crate in vertical, longitudinal or lateral directions on an air freight flight. Pan-American World Airways flew the shipment around the world.

Included in the shipment was a standard 63-pound electric addressing device, manufactured by the Addressograph-Multigraph Corporation of Cleveland, Ohio. The Impacto-graph, a product of Cleveland Impact Recorder, Inc., weighs 10¼ pounds. Recorded by the machine are all impacts sustained by the crate in transit as well as all movements of the crate in vertical, longitudinal or lateral directions over the 22,000-mile route.

At each Pan American station along the route, the shipment was inspected by distributors of Addressograph-Multigraph products and by key airline personnel. The journey began at La Guardia Field, New York, where the shipment was examined by Suzanne Rudinger, Pan American traffic representative, and Charles M. Schenck of the cargo staff.



For extra strength at lowest cost! Get the facts about this reinforced, waterproofed sealing tape.

FREE SAMPLES!

WRITE TO CARLE CORP., FRAMINGHAM 9, MASS.

"Listen, Mr. Traffic Manager"

(Continued from Page 15)

figured out the actual cost of the entire operation. The result was that on all 600 pieces to one state he would put postage for the higher zone and on all 600 orders he would charge only the lower zone postage. It figured to be cheaper that way for assuming that the difference per order amounted to \$.06 that would mean for 600 orders a total of \$36.00. However, it would be reasonable to assume that only half of the orders were over-posted or a total of \$18.00. Now, the Traffic Manager figured that if he were to have a man zone each order individually it would cost far over that in time consumed. Thus it was cheaper to "waste" the postage.

Our own feeling is, that for an emergency operation such as this, the Traffic Manager handled the situation properly. Often times a Traffic Manager is criticized for spending money which apparently is more than normal under ordinary circumstances. However, if the situation is analyzed, such as this one was, it is shown to be far cheaper in the long run.

An efficient Traffic Department is one which realizes that the time of others is costly and should be added to the cost of an operation. We constantly receive letters from customers stating that they have been overcharged \$.10 or \$.17 or \$.20 on a shipment and desire credit for that



DETECTO



There's style ... attention value in gummed tape, too, particularly if it's Tru-Test in bright new colors or special printed designs. And now, for extra convenience and protection, Tru-Test tape is packaged in sturdy corrugated cartons lined with moisture proof bags. Write today for brochure showing Tru-Test colors and examples of printed designs.







SOZ7 HAVENSWOOD AVE CHICAGO 40 ILL

amount. That is sheer foolishness. In the first place, say on the \$.10 overcharge, they had to spend \$.03 to mail the letter. Secondly, one must figure the time of the secretary who wrote the letter. That certainly would add up to another \$.05. And then there is the time consumed in the accounting department making the credit adjustment and lastly the materials such as paper, credil forms, etc. All in all it adds up to far more than the mait overcharge. It just doesn't make sense. Our own policy is to allow any claim under \$1.00 because the time consumed in checking into the case just isn't worth it.

But to get back to the streamlined emergency shipping operation which we have been discussing. A few of the undesirable things which might happen, and which also make this policy unsound for an extended program is that some customers might notice that the postage on the package is more than they have been billed. They might not mention it this time, where they are getting the better of it but on a future shipment which has been properly zoned and on which they would be billed a correct but higher amount they might site the first shipment and wonder why they are now charged more.

Shipping without a packing slip is never smart traffic and in this case the Traffic Manager is taking poetic license to accomplish a major move. The undesirable reactions may be at a minimum for this one time but we are sure that a normal shipping procedure should be followed in the future.

We have cited this case mainly to show that there are certain short cuts in Traffic which may be used once but then only knowingly and in an emergency.

RR's Expenditures Showed Record Amounts in 1949 Four Times as Many Freight Cars Ordered

Capital expenditures for equipment and other improvements by Class I railroads amounted to \$1,312,-200,000 in 1949, the greatest amount for any year on record and an increase of nearly 54 per cent above those made 20 years ago.

More than four times as many freight cars were ordered in the first four months of 1950 by Class I railroads and railroad-controlled private refrigerator car companies as in the same period in 1949.



"Squeezable Squaws" Shipping Labels Dress Up Packages

Based on the success of their series of "Squeezable Squaws" monthly mailing pieces, Navajo Freight Lines, western motor freight carrier, has incorporated this "Indian maiden" theme into colorful shipping labels.

The same shapely models used in the "Squeezable Squaws" photographs are illustrated on the gummedback labels, which are glued to each package passing through any one of the fourteen Navajo terminals in California, Colorado, Arizona, New Mexico and Texas.



WELL STACKED

Well stacked merchandise cuts down breakage. Please handle with care.

Above one of the "attention-getting" shipping labels, aimed to draw the eye as well as the mind, in warning shipping personnel to handle with care, now being used by a Western motor freight line. Picturing equally "dressed" young ladies, the line has four other labels appropriately captioned:

OFF THE SHOULDERS. Don't toes this package off your shoulder. We like you and want you to keep on working here. WATCH YOUR STEP. Take it easy with this package, mister. Keep your best foot forward.

THIS IS NO BULL. This package belongs to our best customer. Please handle with care.

Officials of the company devised the shipping labels in an effort to reduce the amount of breakage on packages handled by their personnel. The effectiveness of this "handle with care" campaign is evident in the decline of damage claims since initial use of the new shipping labels.

Simplify Shipping

with amazing VAPOR rust preventive

Because Angier VPI* Wrap eliminates slushing, metal articles now require less material, less time to package! Shippers report carton weights reduced substantially after changing to this clean, more effective vapor rust preventive. Write today for free Booklets on Angier VPI Wrap!

Reg. U.S.



CORPORATION,

No other form of closure gives so much for so little



Only gummed tape gives you all 5 advantages . . .

- SEALS TIGHTLY, keeps dust, dirt and maisture out.
- · RE-EMPORCES AS IT SEALS, resists
- . SAFER TO HANDLE, no hozordous
- . EASIER TO OPEN with knife or
- · COSTS LESS, requires no expensive machines to apply.



free sample roll of RED STREAK tape

The Brown-Bridge Mills, Inc., Dept. M-508 Troy, Ohio Those Gumming Specialists



40 Wirebound Plants

The versatility of the Wirebound principle—the strength of steel combine with thinner wood -- permits variation of wire gauges, staple spacing, battens and cleats to provide safe structural strength for large to meet all warehousing

"Sand for this free book! Explains in detail Wirebound principles, ad vantages, features and describes how Wirebounds are designed to so size and shape of product. Mail coupon today.

STEED SMIPPING LOTAL SHIPPING COSTS

Wirebound Bas Manufacturers Assn., Room 1199, 327 S. La Salle St., Chicago 4, Hi. Send Booklet of Product Information Send a Sales Engineer



Each numbered paragraph below describes practical, illustrated literature about the newest developments in shipping room supplies, devices and equipment . . . important data every alert, progressive shipping manager should keep filed and available for instant reference. It will pay you to read each item carefully, select those that help with your particular shipping problems. Then all you need do is check and mail the coupon. Shipping Management will see that the material is forwarded with no obligation on your part.

STEEL STRAPPING . . . Makes packages firm, tight, and piller-proof. Ideal for palletizing. For free book simply check 1.

CREPED WADDING . . . that safeguards a wide variety of items, from delicate glass to hardy machine parts. Wide variety of thicknesses. For book on how to improve present packaging check 2.

ANSWER BOOK...Yours for the asking, gives the complete facts on both basic principles and newest developments in steel strapping. Questions on cartons, packages, bundles, crates, bales, carloads, boxes, skids, pallets and cardoor protection answered. Check 3.

UNUSUAL GUMMED TAPE... Available in a wide range of colors and designs. Better-bonding, tested, extra strong. For details check 4. BETTER PACKING . . . safer shipping with wirebound boxes and crates. Helpful information, solutions to problems, guides sent, if you check 5.

ONE OF THE MOST . . . Amazing new time and labor-saving devices to hit the market is the electric stencil machine. Cutting is effortless, faster Ask for this illustrated folder. Check 6.

PARCEL POST SCALE. . . Simply press the zone key. One figure shows the exact postage. Descriptive bulletins free, if you check 7.

TAPE DISPENSERS . . . A complete line of precision built machines, pressure-sensitive, trouble-free, now available. No matter what your business may be there's a pressure-sensitive tape to suit your needs. For complete detailed information check 8.

NEW, MORE COVERAGE... in the 1950 Better Shipping Manual. Let us bill you for the latest edition of this encyclopedia of essential fact and information for the shipping room. Copy on approval if you check 9.

TAPE SAVER . . . The pull-tab opener in every roll saves time as well as tape. For complete particulars check 10.

SUPPLIES... Everything you need for packing and shipping operation and the well run shipping room plus many types of materials handling equipment. For catalog, check 11.

TAPE MACHINE... Moisture is evenly distributed over your tape with this machine that does it automatically. For complete information on this and on tapes check 12.

PRECISION SHIPPING . . . this railroad is equipped for heavier, longer hauls, smoother handling of shipments dependable, on-time service between Texas, Oklahoma and the North. For info check 13.

THIS ILLUSTRATED DATA SHEET
... Describing the features of a fountain brush that enables you to stencil shipments "at the touch of a button" is a must for every shipping department. Check No. 14.

QUALITY CONTROLLED . . . A quality controlled gummed sealing tape. From raw pulp to finished roll. For details check 15.

FACTUAL CASE STUDIES . . . of industrial applications of VPI Wrap can help you decide if this is the solution to your export packaging problems. VPI means vapor phase inhibitor, and it is one of the latest developments in the war against corrosion. To get this valuable information check 16.

ONE-HAND TACKERS . . . that speed up your tagging, fastening and assembly jobs. Self-contained ready for instant use. Folder free, check 17.

Check HELPS By Number—MAIL Today!

SAFER WRAPPING... for your product with this remarkable board. Reduce shipping damage losses, and cheaper to use from the start. Made of finest quality raw materials, flutes perfectly formed, and a unique method of permitting an all-ways flex, for all-ways protection. Sample free, check 18.

SHIPPING INFORMATION . . . Parcel post, express, freight rates and routing. Indexed, loose leaf for frequent revision insertions. Order by checking 19.

BETTER ADHESIVE . . . qualities in this gummed tape. When a better product has been developed industry wants it. Check 20.

POSTAGE METER... print postage in any amount to \$10.00. For speed, nafety and efficiency. Illustrated booklet, no obligation. Just check 21.

HANDBOOK... for gummed tape users. Everything you'll ever want to know about gummed tape sealing problems. Free if you check 22.

GUMMING SPECIALISTS . . . Good paper, good glue and plenty of it to insure a permanent closure. For details and sealing helps check 23.

FINEST INGREDIENTS . . . go into the best tapes, and that's what makes this one of the really quality gummed tapes. Know-how is the secret. Check 24.

WATERPROOF PAPER... reinforced with glass. Light, smooth, non-deteriorating. It's probably just about the toughest thing yon've ever come across in the way of paper. For free sample swatches and prices, check 25.

GUMMED TAPES . . . Select your gummed tapes and specialties from a complete line. List and pertinent facts if you check 26.

What's New

(Continued from Page 19)

illustrations of modern shipping applications from parcel post cartons and various methods of economical bundling to palletizing and carload stowage. It is a small atlas of ideas that will give any shipper aid in suggesting newer methods of reinforcing, some of which are novel and extremely economical.

Bundling is one means of minimizing the need for crating and other protection; the merc application of the galvanized (corrosion-proof) round steel straps in many instances is adequate protection in transport—for k.d. cartons, newspapers, sash and doors, tin cans, etc.

Palletizing, a modern force in economical transportation is depicted by lumber unit hundles on freight cars and in lumber yards, aluminum, zinc and tin pigs self-palletized. Diagonal strapping of cartons, pallets and boxes also has its innings in shipping as it effects a reinforcement that covers corners and the 6 sides of any container, bundle or crate, makes an even

and counter-torsional pull. All methods of this round steel strapping reinforcement keep the shipment in good condition until destination.

Four pages of auxiliary equipment are also shown in the Blue Book. For shipping reference and good practice this book will be a splendid addition to reference for Purchasing Agent, Packaging Engineer, Traffic Manager and Shipping Manager.

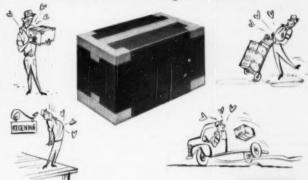
News

(Continued from Page 19)

of Denver, Colo., has obtained a 25-year lease on Board property on the Canal. The plant will be ready to go into operation in September or October.



Gummed tape on your cartons makes a better impression



Gummed tape, correctly applied to your cartons, marks you as a careful and considerate shipper. No other type of closure does such a thorough job of sealing your cartons against dust, dirt and moisture...and at the same time, adds so much to the strength of the container. When you use gummed tape your shipments arrive at their destinations in good condition...neat, clean and intact...and they stay that way until the cartons are opened.

Shippers who care use gummed tape because no other closure does so much for so little!

and shippers who want a good looking gummed tape which gives maximum performance specify...



the largest selling gummed tape in the world

Orange Core is available plain or printed, in a choice of widths, weights, lengths and colors.

Send today
for comprehensive
folder explaining
the advantages of
Orange Core
gummed tape,
including sample
of this excellent
sealing product.
Ask for folder
Dited. "The mark



HUDSON PULP & PAPER CORPORATION, Dept. 0-4 505 Park Ave., New York 22, N. Y.

INDEX TO ADVERTISERS

Angier Corp
Atlantic Gummed Paper Corp22
Better Packages, IncBack Cover
Better Shipping Manual
Brown-Bridge Mills, Inc., The
Central Paper Company
Chippewa Paper Products Co., Inc
Derby Sealers, Inc
Detecto Scales, Inc
Gerrard Steel Co20
Glas Kraft Inc
Gummed Products Company, The 5
Hanline & Sons, Frank
Hansen Mfg. Company, A. L
Hudson Pulp & Paper Corp29
Kimberly-Clark Corp
Leonard & Co., G. R
Marsh Stencil Machine Co
Missouri-Kansas-Texas
Nashua Package Sealing Co., Inc
Pitney-Bowes, Inc
Potdevin Machine Co
Rexford Paper Company
Shipping Management
Signode Steel Strapping Co
Tape, Inc
Wirebound Box Mfg. Ass'n



If you want to keep up with the best and latest ideas and practice read

SHIPPING MANAGEMENT

12 monthly issues filled with helpful, usable information for FREE
Latest 1950 edition of
BETTER SHIPPING MANUAL with this subscription to Shipping
Management.
Send the coupon now.

\$3.00 per year



Hand and electric models . . . for shippers, large and small

E pluribus unum... that's Latin!

Which would be a dandy motto for a postage meter... except the U. S. used it first. It means something like "From many, one"... which is just what the p m does. One operation instead of many!

- I have a parcel post package for East Asphalt, La. that weighs 86c. Instead of a flock of stamps, the postage meter prints one . . . for 86c, on gummed tape, which you can have wet or dry. One stamp instead of many!
- And instead of picking, moistening and sticking a lot of stamps, I set the meter to print one.
- Instead of keeping a postage account—the meter does it . . . has registers that show postage used, and on hand, in dollars and cents.
- Instead of galloping over to the PO every couple days for a few dollars in stamps, with a meter I buy enough postage at a time to last a month. And postage in the meter can't be borrowed or damaged.
- The same meter handles any kind of mail...seals the envelope flap as the stamp is printed.
- A shipping clerk who struggles along without a postage meter these days...just ain't smart. Check the nearest PB office, or send the coupon below.



PITNEY-BOWES, 2246 Pacific St., Stamford, Conn.

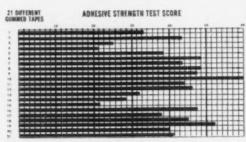
Originators of metered mail. Leading makers of mailing machines. Branches in 93 cities in the United States and Canada.

PITNEY-BOWES, INC.
2246 Pacific St., Stamford, Conn.
Please send the illustrated baoklet to:
Name
Firm

Address



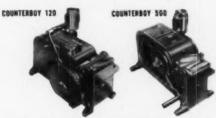
Would you use the same amount of water to moisten the glue of both these tapes?



National Bureau of Standards tests prove that 21 different gummed tapes vary almost 300% in adhesive strength – practically no two tapes alike!

Only Counterboy Moistening Control can adapt the moistening to meet all tape-sealing conditions: quantity and quality of glue — operating speeds — water temperature and hardness — humidity — age of tape — short or long tape lengths — type of box surface, etc. That's why only C.M.C., patented Better Packages feature, gives you all the sticking quality the gummer puts into your tape!

what goes on under your tape?



Leading shipping-room models equipped with patented Counterboy Moistening Control



TIGHT PERMANENT SEAL with C.M.C.—quickly adjustable to condition all the glue and assure deep penetration—whatever the glue formula.



SUPERFICIAL, DANGEROUS SEAL common result of ordinary moistening that leaves a layer of dry, unused glue to cause tape failure hours afterward.

Better Packages, INC.

S INC. COUNTERBOY MOISTENING CONTROL DELIVERS ALL THE STICKING QUALITY THAT'S IN THE GLUE